

REMARKS

I. Status of Claims

Claims 1 and 11 have been amended.

Claims 1-19 remain pending in the application.

In the Office Action, the Examiner rejected claims 1, 2 and 11 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,106,784 to Eltawil et al. in view of U.S. Patent No. 7,010,055 to Harrison et al.

Claims 3-8 and 13-17 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Eltawil et al. in view of Harrison et al. and in view of U.S. Patent No. 6,977,910 to Hosur et al.

Claims 9, 10, 18 and 19 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over Eltawil et al. in view of Harrison et al. in view of Hosur et al. in view of Park et al.

II. Priority Document

In the Office Action, the Examiner did not acknowledge receipt of the certified copy of Korean priority document 2003-0018873. Applicant respectfully submits that the priority document was filed at the U.S. Patent and Trademark Office on March 23, 2004 and requests that receipt be acknowledged.

III. Rejections under 35 U.S.C. § 103(a)

The Examiner rejected claims 1, 2 and 11 under 35 U.S.C. § 103(a) as being unpatentable over Eltawil et al. in view of Harrison et al.

With respect to claim 1, the Examiner admitted that Eltawil et al. fails to teach a transmit diversity signal processor for demodulating the signals combined by the combiner.

To cure the deficiencies of Eltawil et al., the Examiner alleged that Harrison et al. teaches a receiver that combines symbols with a maximal ratio combiner, forming a combined symbol which is demodulated in a demodulator (by referencing col. 8, lines 30-38). The Examiner further alleged that the benefit is that this form of error control coding may be used to further improve feedback reliability (by referencing col. 8, lines 42 and 43).

Applicant respectfully submits that the alleged combination of Eltawil et al. and Harrison et al. does not disclose or teach “a combiner for selectively combining signals output from the fingers according to the determined transmit diversity method” and “a transmit diversity signal processor for demodulating the signals combined by the combiner on the basis of one transmit diversity method selected by the transmit diversity controller” as recited in amended claim 1.

Harrison et al. discloses a receiver 330 that combines feedback symbols with a maximal ratio combiner, forming a combined symbol which is demodulated in a demodulator 403. The combined symbol is then compared against a threshold in a comparator 405. However, there is nothing in Harrison et al. that discloses or teaches that the symbols are combined **according to a transmit diversity method** and the symbols are demodulated **on the basis of one transmit diversity method selected by the transmit diversity controller**. There is nothing in Harrison et al. that teaches or discloses a transmit diversity controller. Likewise, Eltawil et al. does not supply the above noted deficiencies of Harrison et al.

Eltawil et al. discloses a control bus 80 that connects a controller 60 to a plurality of processing units (68, 70) and passes configuration information. The control bus 80 or the controller 60 of Eltawil et al. is not analogous to a transmit diversity controller because neither the control bus 80 nor the controller 60 **determines a transmit diversity method by considering transmit diversity methods used at the Node-Bs**.

According to the Examiner, taking the combined teaching of Eltawil et al. and Harrison et al. as a whole, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the universal rake receiver as taught by Eltawil et al. to include the transmit diversity signal processor for demodulating the signals combined by the combiner by the combiner as taught by Harrison et al. so that the whole system would provide a reduced power consumption receiver with improved feedback reliability.

Applicant respectfully submits that the Examiner has not established motivation for combining Eltawil et al. and Harrison et al. Specifically, the Examiner has not established that Harrison et al. discloses **a transmit diversity signal processor**. Harrison et al. discloses a demodulator that demodulates a combined symbol. However, there is nothing in Harrison et al. that discloses or teaches that the combined symbol is combined **according to a transmit diversity method** and demodulated **on the basis of one transmit diversity method selected by the transmit diversity controller**. Accordingly, the combination of Eltawil et al. and Harrison et al. does not result in the recitations of the claims. The demodulation of symbols in Harrison et al. results in a sequence of symbols (see col. 8, lines 7-15) and does not result in the transmit diversity controller selecting which transmit diversity method to use for demodulating (page 21 of specification).

Likewise, Hosur et al. and Park et al. do not supply the above noted deficiencies of Eltawil et al. and Harrison et al.

In view of the above arguments, the alleged combination of Eltawil et al. and Harrison et al., taken singly or in combination, does not anticipate claim 1. Therefore, the rejection of claim 1 should be withdrawn. The rejection of amended claim 11, which recites “receiving diversity information of the Node-Bs and selecting one transmit diversity method of the bases of the received transmit diversity information” and “demodulating the signals on the basis of the selected transmit diversity method” should also be withdrawn for at least the same reasons


given for claim 1. Also, the rejections of claims 2-10 and 12-19, which incorporate the limitations of respective base claims 1 and 11, should also be withdrawn for at least the same reasons given for claims 1 and 11.

CONCLUSION

Applicant submits that the above amendments and arguments are fully responsive to the Office Action dated April 18, 2007 and respectfully requests the asserted grounds of rejections be withdrawn based on such arguments.

In view of the above, it is believed that the above-identified application is in condition for allowance, and notice to that effect is respectfully requested. Should the Examiner have any questions, the Examiner is encouraged to contact the undersigned at the telephone number indicated below.

Respectfully submitted,


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